

ABSTRACT

A reinforcing method of a concrete structure comprising coating or impregnating a surface portion of the concrete structure with a composition containing (a) a quaternary ammonium silicate in an amount of 5 to 30 parts, in which  $\text{SiO}_2$  is contained in an amount of 10% to 45% by weight, and (b) water in an amount of 95 to 70 parts, on a solid basis, wherein (a) + (b) = 100 parts by weight, thereby improving waterproofness, preventing neutralization, inhibiting chlorine ion permeation, improving resistance to freezing and thawing, increasing mechanical strength, and improving a deterioration prevention effect, durability and resistance to natural staining. A reinforced concrete structure obtained by the reinforcing method is also provided.